

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/755,534	01/12/2004	Armin Bolz	298-225	1318	
28249	7590 08/16/2005	EXAMINER		INER	
DILWORTH & BARRESE, LLP			KAHELIN, MICH	KAHELIN, MICHAEL WILLIAM	
UNIONDALE	VINGTON BLVD. . NY 11553		ART UNIT	PAPER NUMBER	
	,		3762		

DATE MAILED: 08/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Sabachure. So

·	Application No.	Applicant(s)				
	10/755,534	BOLZ, ARMIN				
Office Action Summary	Examiner	Art Unit				
	Michael Kahelin	3762				
The MAILING DATE of this communication app Period for Reply	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 12 Ja	anuary 2004.					
<u> </u>	_					
Disposition of Claims						
<ul> <li>4)  Claim(s) 1-29 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-29 is/are rejected.</li> <li>7)  Claim(s) 1,15,16,18-21 and 23-29 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>						
Application Papers						
<ul> <li>9) ☐ The specification is objected to by the Examiner.</li> <li>10) ☐ The drawing(s) filed on 12 January 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> <li>11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</li> </ul>						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 01042005;04142004	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate	O-152)			

Application/Control Number: 10/755,534 Page 2

Art Unit: 3762

# **DETAILED ACTION**

# **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

## Information Disclosure Statement

2. The information disclosure statements (IDS) submitted on 1/4/05 and 4/14/04 ares noted. The submissions are in compliance with the provisions of 37 CFR 1.97 and 1.98. Accordingly, the information disclosure statements are being considered by the examiner.

# Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or

Art Unit: 3762

REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.) (f) BACKGROUND OF THE INVENTION.

- (1) Field of the Invention.
- (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (I) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

It is suggested that the subject headings of the application not be underlined or bolded.

The disclosure is objected to because of the following informalities: the acronym CPAP on page 1 is not defined, "VP" should read "VF" on page 1, and "caring" should read "carrying" on page 5.

Appropriate correction is required.

# Claim Objections

4. Claims 1, 15, 16, 18-21, 23, and 24-29 are objected to because of the following informalities: "with respect" should be omitted in claim 1, "to" should be inserted between "according" and "claim" in claims 15, 16, 18-21, and 24-29, and "wherein" should be inserted between "17" and "the" in claim 23. Appropriate correction is required.

Application/Control Number: 10/755,534 Page 4

Art Unit: 3762

# Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1, 3, 4, 6, 7, and 10-16 are vague because there are no positively recited method steps in the claims. The claims should be presented in the active voice, not the passive voice, such as: "generating an alarm signal if...", instead of, "an alarm signal is generated if...". Claims 4, 5, 6, and 7 recite the limitation "measuring values [or data]" in the method for detecting an anomaly. There is insufficient antecedent basis for this limitation in the claims. Claim 7 recites the limitation "signal evaluation" in the method for detecting an anomaly. There is insufficient antecedent basis for this limitation in the claim. Claim 8 is vague because it is unclear whether the limitation applies to the alarm in claim 1, or a different alarm. It is suggested that the phrase be changed to, "...wherein the alarm generated is an acoustical...". Claim 9 is vague because it is unclear whether "causing a direct activation of a defibrillator" is actually part of the method, or just a potential property of the control signal. Regarding claim 13, the phrase "in particular" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Claim 14 recites the limitation "stored values" in the method for detecting an anomaly. There is insufficient antecedent basis for this limitation in the claim. Claim 16 is vague because it is unclear to what "it" refers. Application/Control Number: 10/755,534 Page 5

Art Unit: 3762

Regarding claim 17, it is uclear whether the phrase "at least one parameter that characterizes the anomaly in the cardiac activity" refers to the sensor signal or something else. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are between not only the parts listed in claim 20, but also the unlisted parts from claim 17. In addition, the phrase "realized in the form of" is vague because it is unclear whether this claim actually sets forth a tangible apparatus. Claim 25 recites the limitation "at least one parameter that characterizes the cardiac activity of a patient and/or patient data". There is insufficient antecedent basis for this limitation in the claim. Claim 27 recites the limitation "the motion sensors" in the device. There is insufficient antecedent basis for this limitation in the claim because there is no previous mention of a motion sensor. Claim 29 is vague because there is no connection to any other element of the device.

# Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 8. Claims 1, 3, 8, 9, 11-15, 17, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Lowell et al. (6,292,687 B1).

Page 6

Art Unit: 3762

9. In regards to claims 1 and 17, Lowell et al. disclose an apparatus and method for detecting an anomaly in cardiac activity comprising a sensor (fig. 1, element 27) that determines a parameter that characterizes cardiac activity of a patient (col. 2, line 51), carries out an automatic evaluation (col. 2, element 57), and an alarm signal is generated if a parameter characterizing the anomaly is exceeded (col. 2, line 60).

- 10. In regards to claim 3, the parameter is a pulse (col. 2, line 53).
- 11. In regards to claim 8, an audio and visual alarm are activated (col. 3, line 1).
- 12. In regards to claim 9, Lowell et al. disclose that that a remote alarm is activated at the nearest AED location (col. 3, line 18). Please note that the examiner is interpreting this alarm activation as the "direct activation of the defibrillator".
- 13. In regards to claims 11-13, a flag signal is generated and transmitted wirelessly via Bluetooth (col. 7, line 25)
- 14. In regards to claims 14, 15 and 17, patient cardiac data is transmitted with the flag signal (col. 2, line 67). The examiner is interpreting patient cardiac data as the visual and auditory alarm that indicates cardiac arrhythmia. Furthermore, this audiovisual alarm provides information on the current location of the patient.
- 15. Claims 1-10 and 16-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Heilman et al. (5,078,134).
- 16. In regards to claims 1, 2, 3, 17, 18 and 19, Heilman et al. disclose an apparatus which uses a sensor to determine a parameter (ECG) indicating a cardiac fibrillation and an alarm signal is generated in the form of a defibrillation shock (col. 9, line 50), or a visual display (col. 13, line 30). Furthermore, Heilman et al. disclose a device having a

Art Unit: 3762

sensor (col. 8, line 5), signal evaluation unit (col. 8, line 15), and a signal transmitter (col. 8, line 57). Further, the signal generator is connected to a signal transmitter (col. 8, line 46).

- 17. In regards to claim 4, the sensor is on a thoracic band (Fig. 4).
- 18. In regards to claim 5, 6 and 23, the sensory acquisition and evaluation can be considered to be spatially separated or spatially adjacent and transmitted to a different location. In the spatially separated case, the electrode is on the patient's chest and the evaluation unit is on the waist. In the adjacent case, the electrode and evaluation unit are on the patient and the data is transferred to the maintenance subsystem (col. 9, line 1).
- 19. In regards to claim 7, the results are wirelessly transmitted to a signal generator (col. 9, line 15), the signal generator being the modem.
- 20. In regards to claims 8, 9, 10 and 25, an acoustic alarm is generated (col. 8, line 46), the alarm signal causes a direct activation of the defibrillator (col. 8, line 51), and the device has a memory that stores cardiac activity parameters (col. 8, line 25).
- 21. In regards to claims 16 and 27, a chest wall sensor determines if and how the patient is moving (col. 8, line 6).
- 22. In regards to claims 20, Heilman et al. disclose a mobile device with a voltage generator, control unit, and two electrodes (col. 8 and fig. 1)
- 23. In regards to claims 21, the signal evaluation unit forms part of the control unit (fig. 1), (both units are interpreted to be components of the microprocessor).

- 24. In regards to claim 22, the signal evaluation unit is spatially separated from the control unit (the signal evaluation unit is considered to be the patient-worn component and the control unit is considered to be the maintenance subsystem).
- 25. In regards to claim 24, the sensor is considered to be the patient-worn component and the signal evaluation unit is considered to be the maintenance subsystem, and are connected by a wireless link.
- 26. In regards to claim 26, the signal transmitter (defibrillator electrode) and signal generator are connected in a wire-bound fashion (Fig. 4).
- 27. In regards to claim 28, the sensor (Fig. 4, element 36) comprises defibrillator electrodes (Fig. 4, element 20).

#### Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Provided are several examples of external defibrillators.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kahelin whose telephone number is (571)272-8688. The examiner can normally be reached on M-F, 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571)272-4955. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3762

John Of Number: 10// 33,3

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MWK

GEORGE R. EVANISKO PRIMARY EXAMINER 8/12/5

Page 9